Implementation of an adjustable standing desk inking station for improved ergonomics in Mohs surgery



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SURGICAL CHALLENGE

Musculoskeletal pain, particularly in the neck, back, and shoulders, is common in Mohs surgeons and often caused or exacerbated by their clinical responsibilities. Furthermore, most medical offices where Mohs surgery is performed are not furnished with ergonomic equipment to prevent the development of these symptoms. Previous work has shown a discrepancy in musculoskeletal symptoms between shorter and taller surgeons, suggesting that certain equipment might be currently optimized for surgeons of a certain height to the detriment of others. There is a need for improved ergonomics in Mohs surgery with equipment designed considering the varying heights of all team members. The senior author, a tall Mohs surgeon, found himself bending over significantly while grossing and inking Mohs specimens on a standard countertop.

SOLUTION

To address this issue, we implemented an adjustable standing desk over the countertop for our inking station, where we gross and ink our Mohs specimens. The different users (eg, Mohs surgeons, trainees, histotechnicians) can conveniently raise or lower the inking station to an optimal height for their own stature. With this adjustable standing desk, individuals of different heights can work at a level that minimizes flexion of their trunk and neck (Fig 1, A), as well as minimize abduction of their upper arm (Fig 1, B), thereby potentially reducing some of the most common musculoskeletal complaints. Our surgeons endorse the new inking station because it reduces back, neck, and shoulder discomfort. Similar systems can be easily implemented at other institutions.

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Fig 1. Inking station with adjustable standing desk. A, Taller users exhibit increased back and neck flexion when the adjustable desk is low (left) compared with when the desk is raised (right). **B**, Shorter users require prolonged upper arm abduction to use a higher inking station (*left*) but adjusting it to a lower level enables a safer and more comfortable arm position (right).

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